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NOTICE OF ALLOWANCE AND FEE(S) DUE

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02/09/2009

Edwards Vacuum, Inc. 55 MADISON AVENUE Suite 400 MORRISTOWN, NJ 07960

| EXAMINER | | | | |
|--------------|--------------|--|--|--|
| TRINH, TAN H | | | | |
| ART UNIT | PAPER NUMBER | | | |
| 2618 | | | | |

DATE MAILED: 02/09/2009

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/816,703 | 04/02/2004 | Clive Reginald Steer | M00A259 | 1183 |

TITLE OF INVENTION: ACTIVE NOISE CANCELLATION SYSTEM, ARRANGEMENT, AND METHOD

| l | APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|---|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| | nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 05/11/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

| appropriate. All further indicated unless correct maintenance fee notification. | ed below or directed otl | ng the Patent, advance of herwise in Block 1, by (| orders and notification of (a) specifying a new corn | maintenance fees respondence address | will be : ; and/or | mailed to the current (b) indicating a sepa | correspondence address as rate "FEE ADDRESS" for |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | |
| 71134 7590 02/09/2009 Edwards Vacuum, Inc. 55 MADISON AVENUE Suite 400 | | | I SS ac tr | hereby certify that the ates Postal Service of the Mai | nis Fee(s with suf 1 Stop | of Mailing or Transı 5) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the da | deposited with the United t class mail in an envelope above, or being facsimile |
| MORRISTOWN | N, NJ 07960 | | Γ | | | | (Depositor's name) |
| | | | | | | | (Signature) |
| | | | L | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO |)R | ATTO: | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/816,703 TITLE OF INVENTION | 04/02/2004 J: ACTIVE NOISE CAN | ICELLATION SYSTEM | Clive Reginald Steer , ARRANGEMENT, AN | D METHOD | | M00A259 | 1183 |
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| nonprovisional | NO | \$1510 | \$300 | \$ 0 | | \$1810 | 05/11/2009 |
| EXAM | MINER | ART UNIT | CLASS-SUBCLASS | ٦ | 1 | | |
| TRINH | , TAN H | 2618 | 455-522000 | _ | | | |
| "Fee Address" ind PTO/SB/47; Rev 03-(Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Un | ND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Comp | " Indication form ned. Use of a Customer A TO BE PRINTED ON | data will appear on the | gle firm (having as r agent) and the nan torneys or agents. If e printed. ype) patent. If an assign assignment. | a memb nes of up no nam | er a 2ot o e is 3 | ocument has been filed for |
| Please check the appropr | riate assignee category or | r categories (will not be p | orinted on the patent): | ☐ Individual ☐ C | orporati | on or other private gro | up entity 🚨 Government |
| 4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies | | | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | |
| 5. Change in Entity Sta | itus (from status indicatens SMALL ENTITY state | * | ☐ b. Applicant is no le | onger claiming SMA | LL ENT | TITY status. See 37 CF | FR 1.27(g)(2). |
| NOTE: The Issue Fee an interest as shown by the | nd Publication Fee (if req records of the United Sta | uired) will not be accepte ates Patent and Trademarl | ed from anyone other thank Office. | n the applicant; a reg | istered a | attorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | Registration No | | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223 | tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DO | CFR 1.311. The informati 5 U.S.C. 122 and 37 CFR 2 USPTO. Time will vary rden, should be sent to the 2 NOT SEND FEES OR | on is required to obtain on a 1.14. This collection is by depending upon the included the chief Information Off COMPLETED FORMS | r retain a benefit by estimated to take 12 lividual case. Any c icer, U.S. Patent and TO THIS ADDRES | the publ minutes omment Traden S. SENI | ic which is to file (and to complete, including s on the amount of tin nark Office, U.S. Depa D TO: Commissioner f | by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450, |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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| Edwards Vacuum, Inc. | | | TRINH, | TAN H |
| 55 MADISON AV | ENUE | | ART UNIT | PAPER NUMBER |
| Suite 400 MORRISTOWN, NJ 07960 | | | 2618 DATE MAILED: 02/09/200 | 9 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 578 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 578 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

| | Application No. | Applicant(s) | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------|
| | 10/816,703 | STEER, CLIVE REG | GINALD |
| Notice of Allowability | Examiner | Art Unit | |
| | TAN TRINH | 2618 | |
| | TAIN TRINIT | 2010 | |
| The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED or other appropriate comm IGHTS. This application is | in this application. If not include nunication will be mailed in due | ed course. THIS |
| 1. This communication is responsive to <u>11-06-2008</u> . | | | |
| 2. X The allowed claim(s) is/are <u>5-7,9,18-22,30,31,34-36,38,42,</u> | . <u>43 and 45</u> . | | |
| 3. | |) or (f). | |
| 2. ☐ Certified copies of the priority documents have | | ion No | |
| 3. ☐ Copies of the certified copies of the priority do | | | tion from the |
| International Bureau (PCT Rule 17.2(a)). | | · · · · · · · · · · · · · · · · · · | |
| * Certified copies not received: | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | | le a reply complying with the rec | quirements |
| A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | | | OTICE OF |
| 5. CORRECTED DRAWINGS (as "replacement sheets") mus | st be submitted. | | |
| (a) ☐ including changes required by the Notice of Draftspers | on's Patent Drawing Revie | ew (PTO-948) attached | |
| 1) ☐ hereto or 2) ☐ to Paper No./Mail Date | • | | |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | s Amendment / Comment o | or in the Office action of | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t | | | back) of |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT | | | Note the |
| | | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) | 5 Notice of I | nformal Patent Application | |
| Notice of References Cited (P10-692) Dotice of Draftperson's Patent Drawing Review (PTO-948) | | Summary (PTO-413), | |
| 3. ☐ Information Disclosure Statements (PTO/SB/08), | Paper No | o./Mail Date s Amendment/Comment | |
| Paper No./Mail Date | _ | | |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. ⊠ Examiner' 9. □ Other | s Statement of Reasons for Allo | wance |
| | <u> </u> | - | |
| | | | |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ira Lee Zebrak on 02-04-2009. The examiner's amendment is necessary to place amended claims 42-43 and 45 to be in compliance with method claim tied to another statutory category under 35 U.S.C. 101.

2. The application has been amended as follows:

On the listing of claims page 9:

Claim 42, lines 2, after comprising: inserted - - "noise detector mean for" - - .

Claim 43, lines 2, after comprising: inserted - - "noise detector mean for" - - .

Claim 45, lines 2, after comprising: inserted - - "noise detector mean for" - - .

See below:

- 42. (currently amended) A method of at least partially canceling noise, comprising: **noise detector mean for** detecting noise from a noise producing object; emitting sound at a polarity substantially opposite to polarity of the detected noise, and at a frequency and intensity substantially the same as that of the detected noise; and analyzing the detected noise so as to determine when the detected noise is indicative of at least one condition of the noise producing object, and wherein the analyzing comprises comparing the detected noise to information relating to at least one noise profile of the object.
- 43. (currently amended) A method of at least partially canceling noise, comprising: **noise detector mean for** detecting noise from a noise producing object; emitting sound at a polarity substantially opposite to polarity of the

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detected noise, and at a frequency and intensity substantially the same as that of the detected noise; and analyzing the detected noise so as to determine when the detected noise is indicative of at least one condition of the noise producing object, and further comprising providing output indicative of a possible failure associated with the object.

Page 3

45. (currently amended) A method of at least partially canceling noise, comprising: **noise detector mean for** detecting noise from a noise producing object; emitting sound at a polarity substantially opposite to polarity of the detected noise, and at a frequency and intensity substantially the same as that of the detected noise; and analyzing the detected noise so as to determine when the detected noise is indicative of at least one condition of the noise producing object, and wherein the emitted sound is at substantially the same intensity and frequency as that of the detected noise.

Allowable Subject Matter

3. Claims 5-7, 9, 18-22, 30-31, 34-36, 38, 42-43 and 45 are allowed.

Reasons for allowance

4. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 5-6, 9, 18-19, 21-22, 30-31, 34-35, 38, 42-43 and 45, the claims have been written in independent forms including all of the limitations of the base claims and intervening claims, therefore, claims 5-6, 9, 18-19, 21-22, 30-31, 34-35, 38, 42-43 and 45 are allowable with the same reasons set forth in the previous Office action (paper mailed on 07-11-2007).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

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5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

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7.

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Information regarding the status of an application may be obtained from the Patent

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh Division 2618 February 04, 2009

/TAN TRINH/ Primary Examiner, Art Unit 2618